



Navy and Marine Corps Public Health Center "Quick Hits"



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Traumatic Brain Injury and Good Sleep Hygiene

A blow to the head of a Marine in combat or the flag-football player can result in a Traumatic Brain Injury (TBI) event. Each year, about 1.7 million TBI events occur in the United States. Of those sustaining these injuries, about 300,000 require hospitalization and the remainder are treated and released from emergency departments. The TBI can result from a blow to the skull, suddenly thrust out of position, penetrated, or struck by blast pressure waves. The resulting TBI can disrupt normal brain function with severity ranging from mild to severe. TBI can cause a wide range of functional changes that affect thinking, language, learning, emotions, behavior, and/or sensation.

Following needed medical care, the person suffering the TBI may feel confused or stressed. This may alter normal emotional and behavioral responses and result in stress and mood changes. The person may also suffer changes in sleep habits as well as quality of sleep. It is well known that getting a good night's sleep is a very essential part of TBI rehabilitation and recovery. There are many important factors to remember when considering ways to help promote healthy sleep habits.



Functional color MRI image of the brain for use in detecting TBI.

Tips To Help Promote Healthy Sleep Habits...

- Do not consume food or drinks containing caffeine 3 hours prior to bedtime. This includes caffeinated beverages such as coffee, tea and certain sodas, as well as chocolate.
- Avoid naps during the day. If you nap throughout the day, you may not be able to sleep at night. The late afternoon nap may not be a bad thing to do, provided you limit the nap to 30-45 minutes and can sleep well at night.
- No heavy exercise 3 hours prior to bedtime. Regular exercise, particularly in the afternoon, can help deepen sleep. Strenuous exercise within the 2 hours before bedtime, however, can decrease your ability to fall asleep.
- Keep regular bedtime and wake-up hours. The body "gets used" to falling asleep at a certain time, but only if this is relatively fixed. Keeping your time regular is an essential component of good sleeping habits.
- If at all possible, sleep in a quiet environment with soft lighting. If your bedroom is too cold or too hot, it can keep you awake. A cool bedroom is often the most conducive for sleeping. Block out all distracting noise, and eliminate as much light as possible.
- Use the bed for sleep, no TV watching, work, or reading in bed. Don't use the bed as an office, workroom or recreation room. Let your body "know" that the bed is associated with sleeping. If you don't fall asleep within 15-30 minutes, get up, go into another room, and read until sleepy.
- Consult with a health care provider prior to taking over the counter medications. Ask your doctor or pharmacist if the medications you are taking can lead to sleeplessness. The decision to take sleeping aids is a medical one to be made in the context of your overall health.
- Take sleep medications as prescribed and instructed. The goal is to rediscover how to sleep naturally.

POC, Links and Web Resources...

- NMCPHC Homepage: <http://www.nmcphc.med.navy.mil/>
- NMCPHC Health Living: http://www.nmcphc.med.navy.mil/Healthy_Living/Psychological_Health/Stress_Management/sleep.aspx
- Preventing, Treating, and Living with TBI: http://www.brainline.org/landing_pages/Basics.html
- Defense and Veterans Brain Injury Center: <http://www.dvbic.org/Default.aspx>
- Substance Abuse and Mental Health Services Administration: <http://www.samhsa.gov/>